

CLAIMS

- Sub 01
1. A decoder for a digital audiovisual transmission system, the decoder comprising a processor for decompressing and displaying compressed digital picture data and a memory, characterised in that the processor is adapted to decompress and store an image file in its substantially original format and subsequently to convert the image file to at least a second format for storage and display, the first and second format versions of the image file being stored contemporaneously in the memory.
2. A decoder as claimed in claim 1 in which the processor is adapted to convert the image file into a plurality of formats stored contemporaneously with the original version in a memory of the decoder.
3. A decoder as claimed in claim 1 ~~or 2~~ in which the processor is adapted to read and display multiple format versions of an image file stored at that time.
4. A decoder as claimed in ~~any preceding claim~~ <sup>1</sup> in which the processor is adapted to define a plurality of regions in a graphic layer corresponding to a region of the display, each region being defined in part by a location co-ordinate and by the format version of the image files that are processed by the graphic processor and displayed in this region.
5. A decoder as claimed in claim 4 in which the processor is adapted to convert an original image file destined to be displayed in a region into a version corresponding to the format version currently used in that region.
6. A decoder as claimed in claim 4 ~~or 5~~ in which the processor is adapted to process images in the graphic layer superimposed over real-time audiovisual digital data and corresponding to one or more layers displayed on the screen beneath the graphic layer.
7. A decoder as claimed in ~~any preceding claim~~ <sup>1</sup> in which the processor is adapted to decompress picture data sent in a compression standard that uses a look-up table.

8. A decoder as claimed in ~~any preceding claim~~<sup>1</sup> in which the processor is adapted to decompress picture data sent in a standard that uses a red/green/blue colour value associated with each pixel.

5 9. A decoder as claimed in ~~any preceding claim~~<sup>1</sup> in which the processor is further adapted to directly decompress picture data regardless its compression format into a image file of a predetermined format.

10 10. A decoder as claimed in claim 9 in which the processor may be further adapted to directly decompress picture data into a format which uses a look-up table.

11. A decoder as claimed in claim 9 ~~or 10~~ in which the processor may be further adapted to directly decompress picture data into a format which uses a red/green/blue colour value associated with each pixel.

15 12. A decoder as claimed in ~~any preceding claim~~<sup>1</sup> in which the processor comprises a general processor for decompressing digital picture data and a graphic processor for preparing the decompressed data for display.

20 13. A method of digital image processing in a decoder for a digital audiovisual transmission system, the decoder comprising a processor for decompressing compressed digital picture data and for preparing the decompressed data for display, characterised in that the processor decompresses and stores an image file in its substantially original format and subsequently converts the image file to at least a  
25 second format for storage and display, the first and second format versions of the image file being stored contemporaneously in a memory of the decoder.

14. A decoder for a digital audiovisual transmission system substantially as herein described.

30 15. A method of digital image processing in a decoder for a digital audiovisual transmission system substantially as herein described.